Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 11, with the following rewritten paragraph:

Fig. 14 is a sectional view partially showing a main part of a reflection optical system as disclosed in JP 08-292371 A. In Fig. 14, the reflected light flux from the object passes through the diaphragm and enters a reflection optical element B1. In the reflection optical element B1, the light flux is refracted at a surface R1, reflected by surfaces R2, R3, R4, R5, and R6, and then refracted at a surface R7 and emitted from the reflection optical element B1. In the optical path, the light flux is primarily imaged on an intermediate ~~imaging surface~~ image plane around the second surface, thereby forming a pupil around the fifth surface. Then, the light flux emitted from the reflection optical element B1 is finally imaged on an image pickup surface (image pickup surface of an image pickup medium such as CCD).

Please replace the paragraph beginning at page 11, line 4, with the following rewritten paragraph:

Hereinafter, a description will be made of how to represent various components of an optical system used in each embodiment and of common elements through all the embodiments. Fig. 13 illustrates a coordinate system adapted to define constituent data of the optical system of the present invention. In the embodiments, defined as an i-th surface is a surface in an i-th position as viewed along a light beam La1 extending from an object side to an image ~~surface~~ plane (indicated by the alternate long and short dashed line of Fig. 13 and called a reference axis light beam). In Fig. 13, a first surface R1 denotes a diaphragm; a second surface R2, a refraction surface coaxial with the first surface; a third surface R3, a reflection surface tilted relative to the second surface R2; a fourth surface R4 and a fifth surface R5, reflection surfaces shifted from each other and tilted forward; and a sixth surface R6, a refraction surface shifted and tilted relative to the fifth surface R5. The respective surfaces from the second surface R2 to the sixth surface R6 are constituted on one optical element formed of a transparent medium such as glass or plastics.

Please replace the paragraph beginning at page 11, line 27 to page 12, line 6, with the following rewritten paragraph:

Accordingly, in the structure of Fig. 13, the medium from an object surface (not shown) to the second surface R2 is an air; a medium from the second surface R2 to the sixth surface R6 is a certain common medium; and a medium from the sixth surface R6 to an unillustrated seventh surface R7 (e.g., image ~~surface~~ plane) is the air.

Please replace the paragraph beginning at page 12, line 7, with the following rewritten paragraph:

The optical system of the present invention serves as an off-axial optical system, so that the respective surfaces constituting the optical system have no common optical axis. Therefore, in the embodiments, an absolute coordinate system is set by using as the origin a center of a light beam effective diameter of the first surface. In the embodiments, the light beam passing through the origin and a center of a final ~~imaging surface~~ image plane is defined as a reference axis light beam. A route of the reference axis light beam is defined as a reference axis of the optical system. Further, in the embodiments, the direction in which the reference axis light beam travels at the time of imaging is defined as a direction of the reference axis (orientation). Also, the surfaces are numbered in the order of refraction/reflection of the reference axis light beam.

Please replace the paragraph beginning at page 19, line 17 to page 20, line 2, with the following rewritten paragraph:

Also, if an intermediate ~~imaging surface~~ image plane is formed, the effective diameter of the reflection surface can be reduced. However, any relay system is required therefor, resulting in the increased optical path length. Further, when the power of each reflection surface is increased for reducing the optical path length, the decentering error is easily caused. Therefore, in this embodiment, the length in the widthwise direction of the object surface O is made small to thereby reduce the effective diameter of the reflection surface, so that the distance between the surfaces can be shortened without forming the intermediate ~~imaging surface~~ image plane.

Please replace the paragraph beginning at page 20, line 3, with the following rewritten paragraph:

In this embodiment, the number of reflection surfaces on the object surface side as viewed from the diaphragm is represented by X and that on the ~~imaging surface~~ image plane side from the diaphragm is represented by Y. Based on the above assumption, the number of reflection surfaces is set so as to satisfy the following conditional expression:

$$0.65 < X/Y < 1.6$$

Such setting enables the miniaturization of the entire optical system. Note that in this embodiment, X and Y each correspond to 2.

Please replace the paragraph beginning at page 27, line 17 to page 28, line 2, with the following rewritten paragraph:

Also, if an intermediate ~~imaging surface~~ image plane is formed, the effective diameter of the reflection surface can be reduced. However, any relay system is required therefor, resulting in the increased optical path length. Further, when the power of each reflection surface is increased for reducing the optical path length, the decentering error is easily caused. Therefore, in this embodiment, the length in the widthwise direction of the object surface O is made small to thereby reduce the effective diameter of the reflection surface, so that the distance between the surfaces can be shortened without forming the intermediate ~~imaging surface~~ image plane.

Please replace the paragraph beginning at page 35, line 6, with the following rewritten paragraph:

Also, if an intermediate ~~imaging surface~~ image plane is formed, the effective diameter of the reflection surface can be reduced. However, any relay system is required therefor, resulting in the increased optical path length. Further, when the power of each reflection surface is increased for reducing the optical path length, the decentering error is easily caused. Therefore, in this embodiment, the length in the widthwise direction of the object surface O is made small to thereby reduce the effective diameter of the reflection surface, so that the distance between the surfaces can be shortened without forming the intermediate ~~imaging surface~~ image plane.